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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,340	07/30/2003	Hardayal Singh Gill	HSJ9-2003-0107US1	9910

7590 06/16/2005
Robert O. Guillot, Esq.
INTELLECTUAL PROPERTY LAW OFFICES
Suite 660
1901 South Bascom
Campbell, CA 95008

EXAMINER

WATKO, JULIE ANNE

ART UNIT PAPER NUMBER

2653

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/631,340

Applicant(s)

GILL, HARDAYAL SINGH

Examiner

Julie Anne Watko

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 23-26 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-22 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Two claims 23 are present in the application; thus, the claims are not numbered consecutively.

Misnumbered claims 23, 23, 24 and 25 have been renumbered 23-26.

The Examiner apologizes for the delay in correcting the record.

Election/Restrictions

2. Claims 23-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on January 27, 2005.

Drawings

3. The drawings were received on November 3, 2003. These drawings are acceptable.

Specification

4. The disclosure is objected to because of the following informalities:

Different reference numerals refer to the same part. See page 8, line 12, "bias pinning layer 134", and page 9, line 11, "bias pinning layer 148". Furthermore, "bias pinning layer 134" is inconsistent with the appearance of the figures.

The same reference numeral refers to different parts. See page 11, lines 16-17, "second pinning layer 82", and page 8, line 15, "second pinned layer 82".

Appropriate correction is required.

Allowable Subject Matter

5. Claims 1-22 are allowed.

6. The following is an examiner's statement of reasons for allowance: The prior art of record neither shows nor suggests a bias pinning layer disposed parallel to the bias layer, having a width that is greater than the bias layer width, said bias pinning layer inducing a stabilization magnetic field in the bias layer, said bias layer inducing a bias magnetic field in the free magnetic layer.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Carey et al (US Pat. No. 6671139 B2) show a spin valve sensor with free layer 212 and biasing structure 230 comprising ferromagnetic bias layer 220 and AFM bias layer 222. Carey et al (US PAP No. 2003/0137781 A1) show a magnetic head comprising free layer 212, and hard biasing longitudinal bias layer 226 (see Fig. 22). Pinarabasi (US PAP No. 2003/0179514 A1) shows a head with biasing layer structure 240 comprising ferromagnetic pinned layer 244 and AFM pinning layer 248 (see Fig. 10).

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8. This application is in condition for allowance except for the following formal matters:

Objections to the specification are outstanding.

Non-elected claims 23-26 are pending.

Prosecution on the merits is closed in accordance with the practice under *Ex parte*

Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

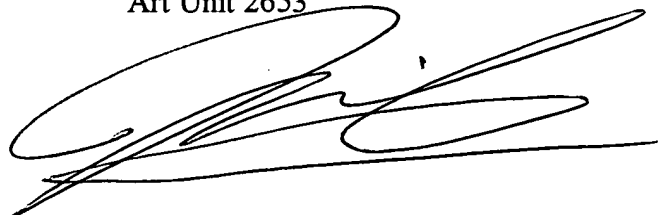
9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Anne Watko whose telephone number is (571) 272-7597. The examiner can normally be reached on Tues. & Thurs. until 9PM, Wed. & Fri. until 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Julie Anne Watko
Primary Examiner
Art Unit 2653

June 13, 2005
JAW

A handwritten signature in black ink, appearing to be 'Julie Anne Watko', written over a horizontal line.